1. Write a Python Program to Check if a Number is Positive, Negative or Zero?

Answer:

a=float(input("Enter the number"))

if a>=0:

if a==0:

print(f"The Entered number is zero :{a}")

else:

print(f"{a} is positive number")

else:

print(f"{a} is negative number")

1. Write a Python Program to Check if a Number is Odd or Even?

Answer:

a=float(input("Enter the number"))

if a%2==0:

print(f"{a} is a even number")

else:

print(f"{a} is a odd number")

1. Write a Python Program to Check Leap Year?

Answer:

a=int(input("Enter the year"))

if (a%400==0) or (a%4==0 and a%100!=0):

print(f"{a} is a leap year")

else:

print(f"{a} is not a leap year")

1. Write a Python Program to Check Prime Number?

Answer:

print("Enter the Number: ")

num = int(input())

p = 0

for i in range(2, num):

if num%i==0:

p = 1

break

if p==0:

print("Prime Number")

else:

print("Not a Prime Number")

**OR**

a=int(input("Enter the Number: "))

if a>=8:

if a%2==0 or a%3==0 or a%5==0 or a%7==0:

print("Not a prime number")

else:

print("Prime number")

else:

if a==1 or a==4 or a==6:

print("Not a prime number")

else:

print("prime number")

1. Write a Python Program to Print all Prime Numbers in an Interval of 1-10000?

Answer:

lower\_value = int(input ("Please, Enter the Lowest Range Value: "))

upper\_value = int(input ("Please, Enter the Upper Range Value: "))

for number in range (lower\_value, upper\_value + 1):

if number > 1:

for i in range (2, number):

if (number % i) == 0:

break

else:

print (number)